

BAR01423P00050US  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: ) DOWELS AND METHOD FOR THE  
JOACHIM TIEMANN et al ) ASSEMBLY OF INSULATING PANELS  
Serial No. 10/647,916 ) ) Group Art Unit 3635  
Filed August 26, 2003 ) ) Examiner Basil S. Katcheves

**TRANSMITTAL OF CORRECTED APPELLANT'S BRIEF ON APPEAL**

Mail Stop Appeal Briefs-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Non-Compliant Appeal Brief dated February 10, 2009, enclosed herewith is a Corrected Brief on Appeal (including an Appendix of Claims) in regard to the above-referenced patent application.

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37 CFR 1.8  
CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Briefs-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 12, 2009.

Signature: \_\_\_\_\_

*Karen Sanderson*

Name: \_\_\_\_\_

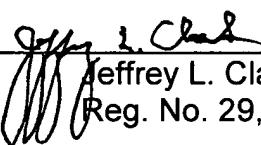
Karen Sanderson

A check in the amount of \$540.00 to cover the fee set forth in 37 CFR §1.17(c) was forwarded with the original Brief on Appeal dated December 22, 2008. If any additional fees are required, they should be charged to our Deposit Account No. 23-0785.

Respectfully submitted,

WOOD, PHILLIPS, KATZ,  
CLARK & MORTIMER

By \_\_\_\_\_

  
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March 12, 2009

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 )

**APPELLANT'S CORRECTED BRIEF ON APPEAL**

Mail Stop Appeal Briefs-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This brief is in support of the Notice of Appeal filed September 15, 2008.

Pursuant to the requirements of the February 10, 2009 Notification of Non-Compliant Appeal Brief, this corrected brief has added references to the specification and drawings to the summary of the independent claims in section V.

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CERTIFICATE OF MAILING

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Signature: \_\_\_\_\_

*Karen Sanderson*

Name: \_\_\_\_\_

Karen Sanderson

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**I. REAL PARTY IN INTEREST**

The real party in interest is EJOT GmbH & Co. KG., owner by Assignment.

**II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals and interferences.

**III. STATUS OF CLAIMS**

Claims 1, 2, 4, 5, 22-26, 28 and 29 are pending in the application. Claims 3, 6-21 and 27 have been cancelled. Claims 1, 2, 4, 5, 22-26, 28 and 29 stand rejected, and all are being appealed.

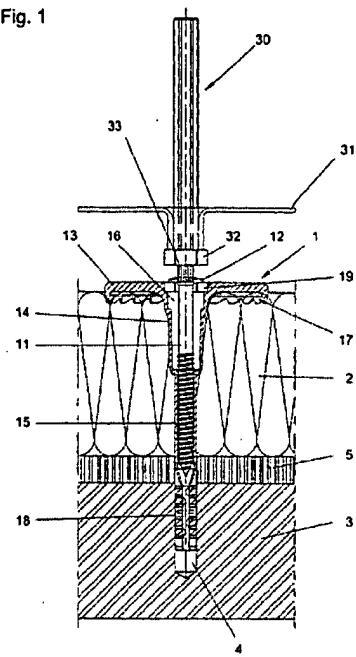
**IV. STATUS OF AMENDMENTS**

There have been no amendments filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER<sup>1</sup>

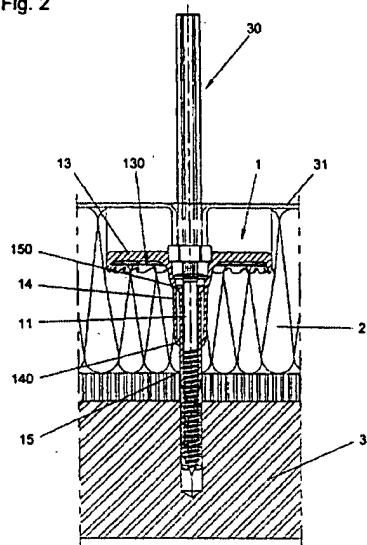
Broadly stated, the claimed invention relates to a dowel structure which may be

Fig. 1



extended through an insulating plate 2 to secure it to an underlying layer (such as an intermediate layer 5 and brickwork 3). The dowel 1 includes a flange or pressing plate (13) with a tooth-shaped cutting edge 17 which may be used to cut into the insulating plate 2. A driving device 30 includes a drive 32 received in a recess 19 in the pressing plate 13 allowing the device 30 to rotate and press the dowel 1 so that the pressing plate cutting edge 17 will cut the insulating plate 2, allowing the pressing plate 13 to be pushed into the insulating plate 2 by shortening the boxed highlighted area in Fig. 2 by an expansion element 11 (as contrasted with full extension in Fig. 1). This provides a smooth cut radial face surface around the recess above the pressing plate 13. In the illustrated embodiment of Figs 1-3, the expansion element 11 is a screw extended through the dowel sleeve 15 and into the expansion zone 18 of the sleeve 15 to provide solid anchorage in the underlying layer (brickwork 3), with the head of the screw seating in the recess 16 to secure the insulating plate 2 with a portion

Fig. 2



<sup>1</sup>The claims do not use means plus function language.

compressed and a clean area above that compressed portion to facilitate the later good fitting insertion of a covering 21 in that recess (see Fig. 3). [Paragraphs 34-35 of the published application].

Claims 1, 28 and 29 are independent.

**Independent claim 1** recites, *inter alia*, a dowel (1) for use in the assembly of an insulating plate (2) on a substructure (3) (e.g., page 9, lines 14-15; Figs. 1-9), where the dowel (1) has a pressing plate (13) and a dowel sleeve (15) attached to the pressing plate (13) (e.g., page 9, lines 15-17; Figs. 1-4) for taking up an expansion element (11) having an expansion element head (12), wherein the dowel sleeve (15) includes an expansion zone (18) (e.g., page 10, lines 2-5; page 11, lines 4-7; page 13, lines 6-8; page 15, lines 4-10; page 15, lines 10-14; Figs. 1-4, 7). A tooth-shaped cutting edge (17) extends from the lower side of the outer circumference of the pressing plate (13) (e.g., page 9, lines 17-19; page 10, lines 12-15; Figs. 1-4), with cutting elements curved along a circumferential length to substantially follow the pressing plate outer circumference and adapted to cut a smooth circular face into the insulating plate (2) (e.g., page 10, lines 15-18; Figs. 1-4) during pulling in of the pressing plate (13) into the insulating plate (2) under simultaneous compression of the insulating plate (2) (e.g., p. 10, lines 18-19; Figs. 2-3).

**Independent claim 28** recites, *inter alia*, a dowel (1) for the assembly of an insulating plate (2) on a substructure (3) (e.g., page 9, lines 14-15; Figs. 1-9) having a pressing plate (13) and a dowel sleeve (15) attached to the pressing plate (13) (e.g., page 9, lines 15-17; Figs. 1-4) for taking up an expansion element (11) having an

expansion element head (12), wherein the dowel sleeve (15) includes an expansion zone (18) (e.g., page 10, lines 2-5; page 11, lines 4-7; page 13, lines 6-8; page 15, lines 4-10; page 15, lines 10-14; Figs. 1-4, 7). The pressing plate (13) has a single planar lower side circular about an axis with a maximum radius from the axis at its single outer rim of the plate lower side<sup>2</sup> (e.g., page 10, lines 12-18; Figs. 1-4) and cutting elements on the lower side of the pressing plate consisting of cutting devices (17) arranged at the outer rim, the cutting elements being curved with the maximum radius to substantially follow the pressing plate outer rim.

**Independent claim 29** recites, *inter alia*, a dowel (1) for use in the assembly of an insulating plate (2) on a substructure (3) (e.g., page 9, lines 14-15; Figs. 1-9), the dowel (1) having a pressing plate (13) and a dowel sleeve (15) attached to the pressing plate (13) (e.g., page 9, lines 15-17; Figs. 1-4) for taking up an expansion element (11) having an expansion element head (12), wherein the dowel sleeve (15) includes an expansion zone (18) (e.g., page 10, lines 2-5; page 11, lines 4-7; page 13, lines 6-8; page 15, lines 4-10; page 15, lines 10-14; Figs. 1-4, 7). The pressing plate (13) has a lower side with a single outer circumference, with cutting elements on the lower side of

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<sup>2</sup>As explanatory background, note that this and similar language in claim 29 was added during previous prosecution to distinguish from the structure at right in Romine U.S. Patent No. 6,308,483. At that time in prosecution, the barb elements 146 at different tiers of a multi-tiered surface were being used as a basis to reject the claims, with the assertion in the rejection being that the barb elements 146 of Romine were each at the outer circumference of a tier. Romine is no longer used to reject the claims.

the pressing plate consisting of a tooth-shaped cutting edge (17) extending from at the lower side of the pressing plate (13) at the outer circumference of the pressing plate (e.g., page 9, lines 17-19; page 10, lines 12-15; Figs. 1-4) and adapted to cut a smooth circular face into the insulating plate (2) (e.g., page 10, lines 15-18; Figs. 1-4) during pulling in of the pressing plate (13) into the insulating plate (2) under simultaneous compression of the insulating plate (2) (e.g., p. 10, lines 18-19; Figs. 2-3).

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The ground of rejection to be reviewed on appeal is the rejection of claim nos. 1, 2, 4, 5, 22-26, 28 and 29 under 35 U.S.C. § 102(b) as being anticipated by Damico U.S. Patent No. 4,579,496.

## VII. ARGUMENT

### A. Prior art Damico

Damico discloses a simply constructed hole saw guide for cutting a new hole in a work piece, where the new hole partially

overlaps or surrounds an existing hole

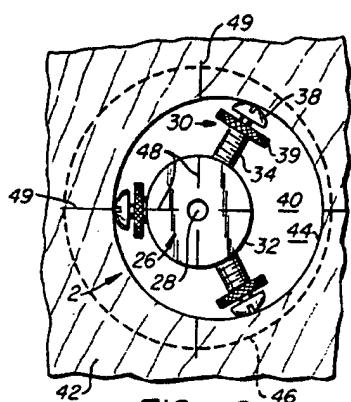
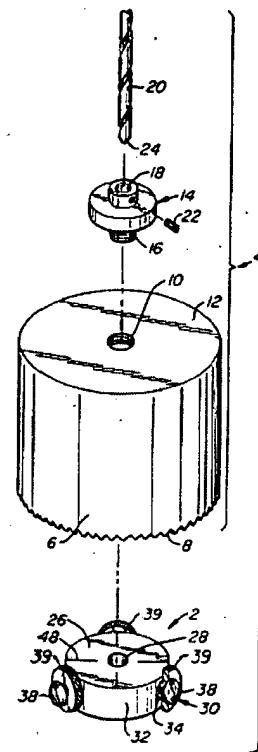


FIG. 2.

in the work piece (column 1, lines 36-40 and Fig. 1 at right). That is, as best illustrated in Fig. 2, the Damico guide 2 is located inside an existing hole 40 with the three guide arms 30 variously extended to engage the inner

circumferential surface 44 of the hole 40 so as to position the guide hole 28 (eccentrically in Fig. 2) relative to the center of the hole 40 so that a different eccentric hole 46 can be cut by the lower cutting edge 8 of the hole cutting assembly 4 (see Fig. 1)



The advantage of the Damico hole saw guide is that it does not require extraordinary clamping and guiding means as would otherwise be required (column 1, lines 59-63), with the guide being especially useful if a hard material such as metal is cut in order to prevent the hole saw from walking around the work piece when starting to cut a hole (column 1, lines 19-26).

This Damico hole saw/hole saw guide does not represent a dowel, as asserted by the Final Office Action in rejecting the claims. Rather, this hole saw belongs to an

entirely different technical field (Int. Cl. B23B 49/00 versus Int. Cl. E04F 13/08 for the inventive dowel). Moreover, whereas a dowel is a device which is used to hold components together, Damico is a device used merely to cut a hole in one component. It does not hold two components together, it is not intended to hold two components together, and instead is merely one component (a saw) which is used to cut a second component (the workpiece) after which the two components are permanently separated. That is, the entire structure of the Damico device is removed from the hole location after the hole is cut which is certainly not something which would thereafter hold separate components together like a dowel).

Simply put, (1) Damico is a drill structure only and would simply not be considered by the person skilled in the art when addressing dowels, and (2) Damico teaches nothing relevant to use of a dowel to connect two components together as disclosed and claimed in the present application.

B. There are Vast Differences Between Damico and the Present Invention

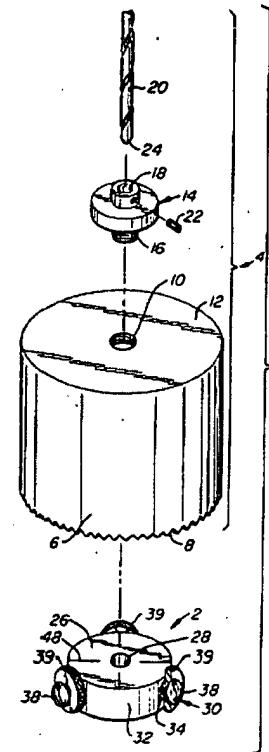
The present invention as disclosed and claimed relates to a dowel structure used to assemble an insulating plate onto a substructure. As explained in detail above, this invention allows for deepened mounting of the dowel in insulating material whereas Damico provides no teaching whatsoever relevant to such a mounting.

Moreover, the hindsight matching of a few components of the claimed invention to components of the completely different Damico device cannot and would not teach the claimed invention. Moreover, the claims clearly recite differences from the Damico structure, making the 35 U.S.C. §102(b) rejection inappropriate:

1. The top 12 of the Damico hole saw is not a pressing plate of a dowel such as recited in all of the claims (e.g., "dowel (1) having a pressing plate (13)" in claim 1). *The top 12 of the saw is clearly not intended to press anything at all.* To the contrary, the end 24 of the pilot drill 20 is specifically mounted to extend below that saw top 12 (col. 2, lines 24-27) and thus would **prevent** the saw top 12 from pressing against anything. That is, rather than being intended to be a pressing plate, it is intended to **not** be a pressing plate.
2. Also contrary to the assertion in the Office Action, the threaded hole 10 in Damico is not in any way a dowel sleeve arranged at the pressing plate in order to receive an expansion element as recited in the claims. Rather, the threaded hole 10 in Damico receives the threaded end 16 of a mandrel 14 which is secured to the pilot drill 20 (by set screw 22).

3. Still further contrary to the assertion in the Office Action, the saw top 12 is also not an "expansion element head" (as variously recited in all the independent claims). Neither does the hole 10 in Damico (see Fig. 1 at right) include an expansion zone as also recited in the claims (e.g., all of the independent claims recite that "the dowel sleeve (15) comprises an expansion zone (18)"). Damico's saw top 12 does not involve expansion of any sort - it just has a hole 10.

In summary, Damico is a completely different structure from the claimed invention, with a few similar elements. Despite those few similar elements, the structure as claimed is clearly different whereby the independent claims are all novel over Damico. Moreover, the Damico and claimed structures are so fundamentally different that the differences recited in the claims could not in any way be said to be obvious modifications of the structure. There is nothing in the Damico cutting saw (which simply cuts a hole and is then completely removed) which would translate in any meaningful way to Applicant's invention which provides a deepened mounting of dowels in insulating material to retain insulating material on an underlying structure.



C. Groups of Appealed Claims

1. Claim 28 and Dependent Claim 26

As noted in Section V. above, independent claim 28 recites a dowel for assembling an insulating plate (2) on a substructure (3 and 5). As detailed in Section VII. above, Damico recites a saw for cutting a hole in a substructure. Damico does not include a dowel and will not assemble anything other than a temporary off-center guide on a substructure.

Independent claim 28 recites a pressing plate with an attached dowel sleeve (15) for taking up an expansion element (11) having an expansion element head (12), with an expansion zone (18) in the dowel sleeve (15). Damico recites a saw secured to a drill bit without any dowel sleeve, without any expansion zone in a dowel sleeve, without any expansion element and without any expansion element head.

As explained in greater detail above, these structures are very different and the claims variously recite those structural differences. The rejection is based on an improper hindsight use of Applicant's disclosure to interpret elements of Damico to be something which they are not. Claim 28 clearly recites structure different from Damico, and the 35 U.S.C. § 102(b) rejection is therefore improper.

Claim 26 depends from claim 28 and is grouped with claim 28 here for that reason.

2. Claims 1 and 29 and Dependent Claims 4, 5 and 22

Independent claims 1 and 29 include the structural details discussed above with claim 28, and thus should be allowable for the same reasons as claim 28. Claims 1

and 29 additionally recite, however, that the cutting edge (17) is adapted to cut a smooth circular face into the insulating plate (2) during pulling in of the pressing plate (13) into the insulating plate (2) under simultaneous compression of the insulating plate (2), and are therefore allowable for that further reason as well. Damico's cutting saw does not compress anything, let alone an insulating plate, nor is the cutting saw pulled in during use.

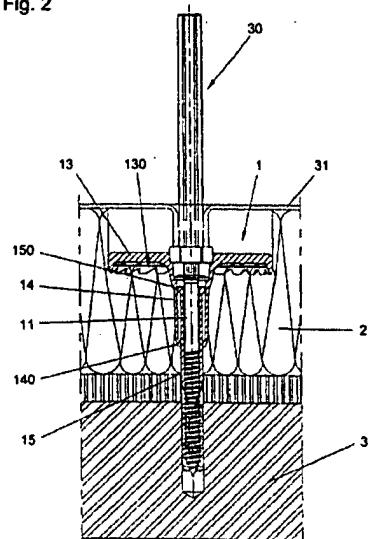
Claims 4, 5 and 22 depend on claim 1 and are grouped together with claims 1 and 29 on that basis.

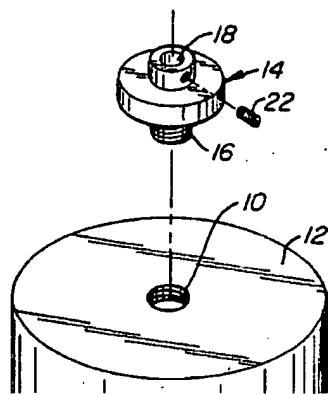
### 3. Dependent Claims

The dependent claims are all submitted to be allowable for the same reasons as their base claims. However, several of the dependent claims are also submitted to be allowable for additional independent reasons as well.

#### a. Claims 2 and 23

Claim 2 depends from claim 1 and further Fig. 2 recites a pressing plate shaft (14) attached with the pressing plate (13), where the pressing plate shaft (14) and the dowel sleeve (15) can be axially shifted against each other (see Fig. 2 of the application at right). This further recites the advantageous structure of the expansion element allowing the pressing plate 13 to be pressed in so as to compress the insulation as previously described.





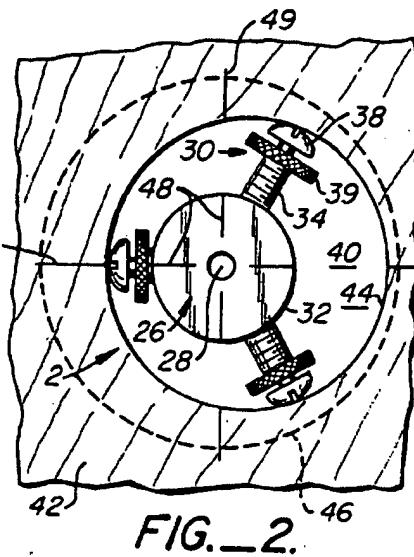
As already noted, Damico has no "pressing plate", nor does it have a "pressing plate shaft" which can be axially shifted relative to a dowel sleeve. The supposed "shaft (16)" of Damico is simply a threaded end of a mandrel (14) which must be screwed into a matching threaded hole (10) to tighten the mandrel (14) against the top (12) of the saw in order for the saw to operate properly.

Claim 23 depends from claim 2 and is grouped with claim 2 here for that reason.

b. Claims 24 and 25

Claims 24 and 25 depend from claims 22 and 23, respectively, and each recite that the pressing plate (13) includes an engagement device, in which the expansion element (11) can engage.

It is respectfully submitted that the assertion that the saw guide (2) is an "expansion element" within the meaning of this claim reads Damico beyond the breaking point relative to the claimed invention. That is, the supposed "pressing plate" of Damico is said to be the top 12 of the saw 6, but it is clear from Fig. 2 of Damico (at right) that the saw guide (2) of Damico does not engage the saw



(6), and in fact is intended to be spaced from it (*i.e.*, from the hole (46) to be cut by the saw (6)). Otherwise, the saw (6) would cut the guide (2).

D. Summary

For the above stated reasons, the rejection of claims 1, 2, 4, 5, 22-26, 28 and 29 as anticipated under 35 U.S.C. §102(b) by Damico U.S. Patent No. 4,579,486 are respectfully submitted to be improper, and should be overturned.

Respectfully submitted,

WOOD, PHILLIPS, KATZ,  
CLARK & MORTIMER

By \_\_\_\_\_

  
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**VIII. APPENDIX OF CLAIMS**

1. A dowel (1) for use in the assembly of an insulating plate (2) on a substructure (3), said dowel (1) having a pressing plate (13) and a dowel sleeve (15) attached to said pressing plate (13) for taking up an expansion element (11) having an expansion element head (12), wherein the dowel sleeve (15) comprises an expansion zone (18),

characterized by

said pressing plate (13) having a single planar lower side with a single outer circumference; and

cutting elements on the lower side of the pressing plate consisting of a tooth-shaped cutting edge (17) extending from the lower side of the pressing plate (13) at the outer circumference of said pressing plate, said cutting elements being curved along a circumferential length to substantially follow said pressing plate outer circumference and adapted to cut a smooth circular face into the insulating plate (2) during pulling in of said pressing plate (13) into the insulating plate (2) under simultaneous compression of said insulating plate (2).

2. Dowel according to claim 1, characterized by a pressing plate (13) having a pressing plate shaft (14) attached therewith, wherein the pressing plate shaft (14) and the dowel sleeve (15) can be axially shifted against each other.

4. Dowel according to claim 1 characterized in that the pressing plate (13) includes an engagement device, in which the expansion element (11) can engage.

5. Dowel according to claim 1, characterized in that the dowel sleeve (15) comprises an anti-twist device against twisting of the dowel sleeve (15) within the bore-hole (4).

22. Dowel according to claim 1, characterized in that the pressing plate (13) comprises a recess (19) for the engagement of a drive (32, 33).

23. Dowel according to claim 2, characterized in that the pressing plate (13) comprises a recess (19) for the engagement of a drive (32, 33).

24. Dowel according to claim 22, characterized in that the pressing plate (13) includes an engagement device, in which the expansion element (11) can engage.

25. Dowel according to claim 23, characterized in that the pressing plate (13) includes an engagement device, in which the expansion element (11) can engage.

26. Dowel according to claim 28, characterized in that the dowel sleeve (15) comprises an anti-twist device against twisting of the dowel sleeve (15) within the bore-hole (4).

28. Dowel (1) for the assembly of an insulating plate (2) on a substructure (3) having a pressing plate (13) and a dowel sleeve (15) attached to said pressing plate (13) for taking up an expansion element (11) having an expansion element head (12), wherein the dowel sleeve (15) comprises an expansion zone (18),

characterized by

the pressing plate (13) having a single planar lower side circular about an axis with a maximum radius from the axis at its single outer rim of said plate lower side, and

cutting elements on the lower side of said pressing plate consisting of cutting devices (17) arranged at the outer rim, said cutting elements being curved with said maximum radius to substantially follow said pressing plate outer rim.

29. A dowel (1) for use in the assembly of an insulating plate (2) on a substructure (3), said dowel (1) having a pressing plate (13) and a dowel sleeve (15) attached to said pressing plate (13) for taking up an expansion element (11) having an expansion element head (12), wherein the dowel sleeve (15) comprises an expansion zone (18),

characterized by

said pressing plate (13) having lower side with a single outer circumference; and cutting elements on the lower side of the pressing plate consisting of a tooth-shaped cutting edge (17) extending from at the lower side of the

pressing plate (13) at the outer circumference of said pressing plate, said cutting elements being curved along a circumferential length to substantially follow said pressing plate outer circumference and adapted to cut a smooth circular face into the insulating plate (2) during pulling in of said pressing plate (13) into the insulating plate (2) under simultaneous compression of said insulating plate (2).

**IX. EVIDENCE APPENDIX**

There is no evidence that has been entered by the Examiner and relied upon by Appellant.

**X. RELATED PROCEEDING APPENDIX**

There has been no decision by a Court or the Board in any proceeding identified pursuant to (c)(1)(ii) of 37 C.F.R. §41.37.